



Assistive Technology Solutions for Writing

Carolyn Phillips, Tools for Life

With contributions from Martha Rust, Liz Persaud, Ben Jacobs & Ben Satterfield

www.gatfl.org

For Handouts: <http://www.gatfl.gatech.edu/tflwiki>

**EASI Webinar
Series 2015
March 19
2:00 PM to 3:00 PM**

www.amacusg.org



Description

Technology can help all students achieve academic success! Join us for a webinar focused on assistive technology solutions for writing. Presenters will share some of the basic difficulties individuals with learning disabilities encounter when they are writing and then provide examples of how low, mid and high assistive tech devices are creating solutions. Discussion will focus on specific environments and how these devices assisting people living with various learning disabilities in college. Strategies, solutions, and resources that provide supports will be discussed.

For Handouts: <http://www.gatfl.gatech.edu/tflwiki>

AMAC

AMAC Accessibility is a social change organization on a mission to create affordable services for governmental, private and non-profits organization working with individuals with disabilities. Services include e-text, braille, captioning, assistive technology, office management software and consulting.





Accessibility Made Smart

AMAC creates practical solutions that work, with a focus on utility, ease of use, and high quality.

- **Accessibility Consulting** focuses on organizational accessibility needs with evaluation, technical assistance, customer support, and website accessibility solutions.
- **Braille Services** produces customized projects from both print materials and electronic text including partial books and chapters or graphics only using cutting-edge technology.
- **Captioning Services** makes classrooms, meetings, labs and other audio environments fully accessible for deaf or hard-of-hearing.
- **Professional E-Text Producers** provide high-quality e-text in many formats such as PDF, DOC, DAISY, and HTML.
- **Certified Assistive Technology team** provides on-site and remote assessments, demonstrations, training and technical assistance for education, work, and daily living environments.

For more information, please visit our website at www.amacusg.org

Tools for Life Mission

We're here to help Georgians with disabilities gain access to and acquisition of assistive technology devices and assistive technology services so they can live, learn, work, and play independently in the communities of their choice.



TFL AppFinder



Georgia Tech TOOLS for LIFE
Georgia's Assistive Technology Act Program

HOME ASSISTIVE TECHNOLOGY TFL NETWORK CALENDAR OF EVENTS

Search our Site Go

TRAINING
FUNDING
PUBLICATIONS
TFL WIKI
MEET THE TFL TEAM
MEET THE ADVISORY COUNCIL
DIRECTIONS/MAP
JOIN OUR MAILING LIST
SCHEDULE A TOUR

Welcome AT Services Try AT Get AT AT Guides Research

Learn More about AT through Hands-On Demonstrations

★★★★★

Welcome to Tools for Life

Tools for Life, Georgia's Assistive Technology Act Program, is dedicated to increasing access to and acquisition of assistive technology (AT) devices and services for Georgians of all ages and disabilities so they can live, learn, work and play independently and with greater freedom in communities of their choice.

Tools for Life and the TFL Network work collaboratively together to accomplish our mission through:

IDEAS CONFERENCE

JUN 2 Epworth by the Sea, St Simons Island

WEBINARS

MAY 28 [Georgia's Leadership Model for Increasing Accessible ICT in State Government](#)

JUN 25 [Learn More and Do More! Exploring Accessibility and Apps for Android](#)

JUL 30 [Position for Work: A Closer Look at Workplace Accommodations & Assessments](#)

- Current Webinar Schedule
- Webinar Archives

TOOLS FOR LIFE APPFINDER

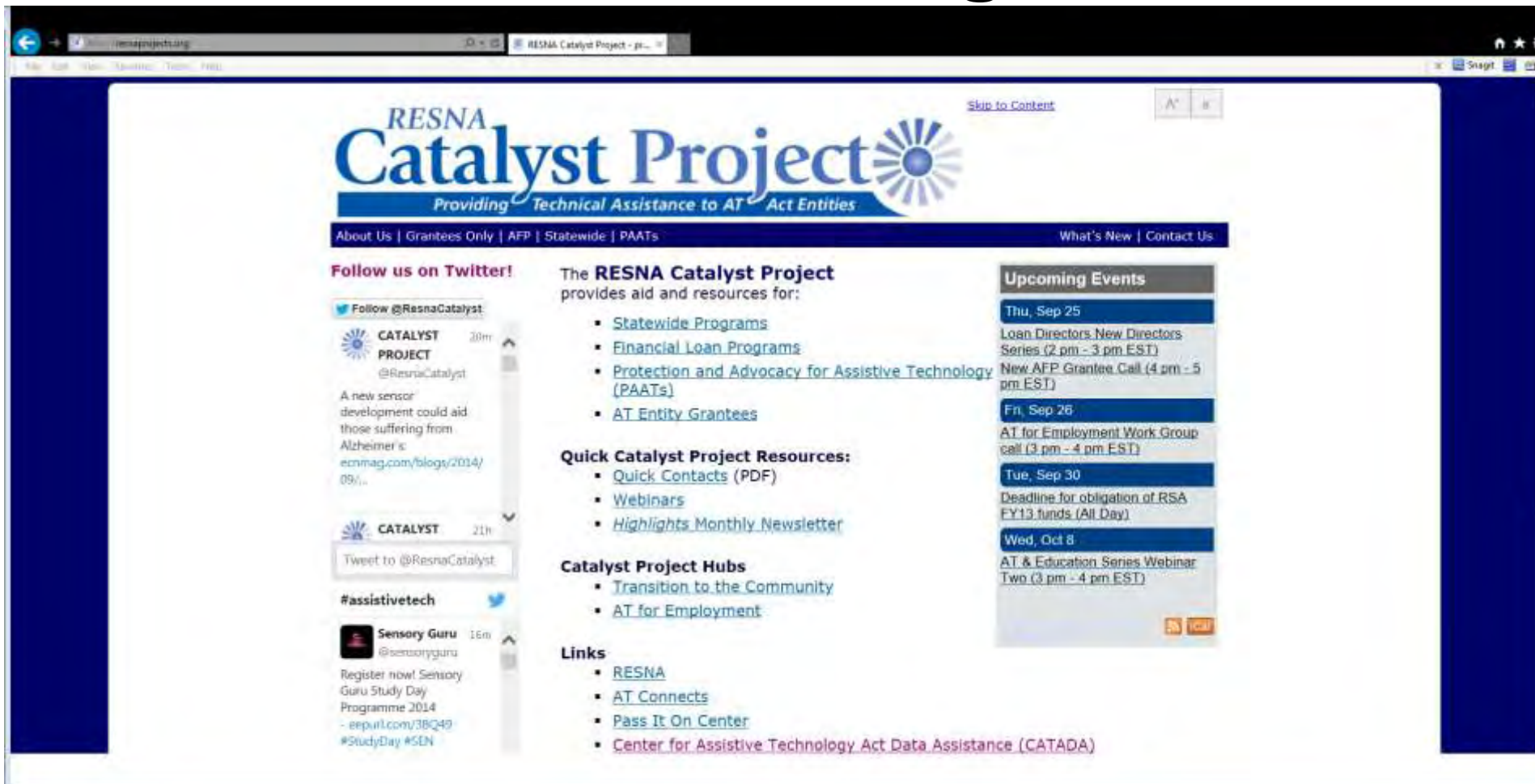


...For Living, Learning, Working, and Playing.

AT ONLINE EXCHANGE



Get to Know Your AT Act Program



The screenshot shows the RESNA Catalyst Project website. The header features the RESNA Catalyst Project logo with the tagline "Providing Technical Assistance to AT Act Entities". Navigation links include "About Us", "Grantees Only", "AFP", "Statewide", "PAATs", "What's New", and "Contact Us".

Follow us on Twitter!

Follow @ResnaCatalyst

CATALYST PROJECT @ResnaCatalyst

A new sensor development could aid those suffering from Alzheimer's: [ecnmag.com/blogs/2014/09/...](http://ecnmag.com/blogs/2014/09/)

CATALYST 21h

Tweet to @ResnaCatalyst

#assistivetech

Sensory Guru @sensoryguru

Register now! Sensory Guru Study Day Programme 2014 - enpul.com/386249 #StudyDay #SEN

The RESNA Catalyst Project provides aid and resources for:

- Statewide Programs
- Financial Loan Programs
- Protection and Advocacy for Assistive Technology (PAATs)
- AT Entity Grantees

Quick Catalyst Project Resources:

- Quick Contacts (PDF)
- Webinars
- Highlights Monthly Newsletter

Catalyst Project Hubs

- Transition to the Community
- AT for Employment

Links

- RESNA
- AT Connects
- Pass It On Center
- Center for Assistive Technology Act Data Assistance (CATADA)

Upcoming Events

Thu, Sep 25

Loan Directors New Directors Series (2 pm - 3 pm EST)

New AFP Grantee Call (4 pm - 5 pm EST)

Fri, Sep 26

AT for Employment Work Group call (3 pm - 4 pm EST)

Tue, Sep 30

Deadline for obligation of RSA FY13 funds (All Day)

Wed, Oct 8

AT & Education Series Webinar Two (3 pm - 4 pm EST)

- <http://resnaprojects.org/>

Why Assistive Technology?

- For a person without a disability, technology makes things easier....
- For a person with a disability, technology makes things possible.
- **TIP: USE AT. I have yet to meet a successful student with disabilities who doesn't use Any AT.**





What is Assistive Technology?

Assistive Technology Device

...any item, piece of equipment or product that is used to increase, maintain or improve functional capabilities of individuals with disabilities.

- Public Law 105-394 [29 USC 2201]

Low/No-tech

- pencil grip
- adapted books
- slant board
- highlighters, tape
- magnifiers
- color coding
- read to out loud
- picture schedule
- strategies for memory
- colored transparencies
- Proof readers
- note taker

Mid-Tech

- word prediction
- text to speech
- speech to text
- spell checkers
- talking calculators
- digital recorders
- organizers
- e-books
- adapted keyboard
- adapted mouse
- adapted toys
- CCTV
- apps under \$100

High-Tech

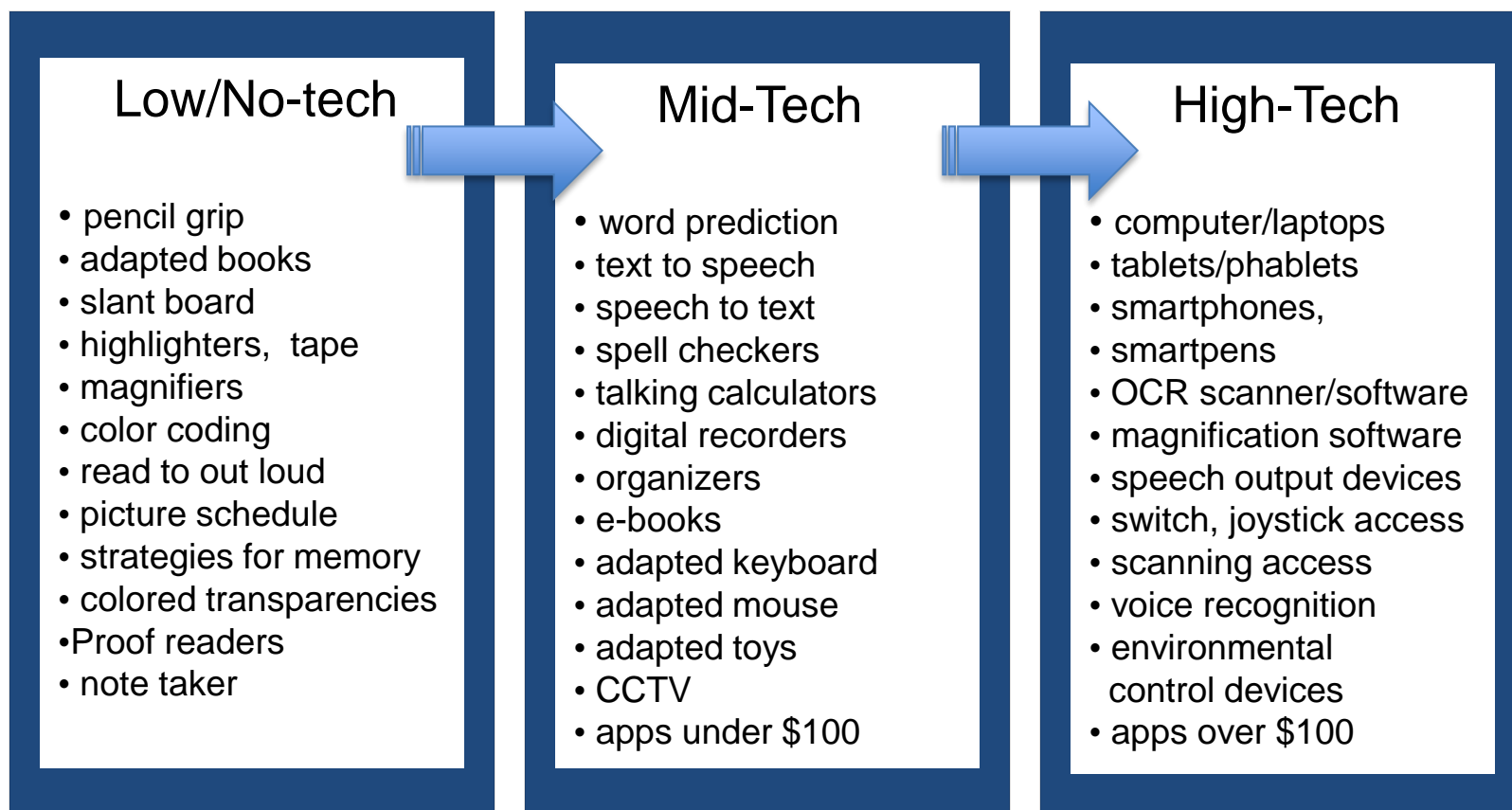
- computer/laptops
- tablets/phablets
- smartphones,
- smartpens
- OCR scanner/software
- magnification software
- speech output devices
- switch, joystick access
- scanning access
- voice recognition
- environmental control devices
- apps over \$100



Assistive Technology Continuum

Observations & “Hanging out with Intent”

Assistive Technology is a **continuum of tools, strategies, and services** that match a person’s needs, abilities and tasks.





Moving from Information to Action

Evaluations for Learning Disabilities

- ☐ One to one assessment
- ☐ Comprehensive battery of tests
- ☐ Detailed report with recommendations for support in work and/or learning

- What did You learn in your LD Evaluation?
- Moving from Information to Action
 - Using your Evaluation results as an Action Plan for AT



Moving from Information to an AT Action Plan

Dysgraphia

- “A specific learning disability that affects a person’s handwriting ability and fine motor skills.
- Problems may include illegible:
 - handwriting,
 - inconsistent spacing,
 - poor spatial planning on paper,
 - poor spelling, and
 - difficulty composing writing as well as thinking and writing at the same time.”
- What does this information tell us regarding our AT Action Plan?
<http://ldaamerica.org/types-of-learning-disabilities/>



Moving from Information to an AT Action Plan - Dyslexia

Dyslexia

- A specific learning disability that affects reading and related language-based processing skills. Dyslexia is sometimes referred to as a Language-Based Learning Disability.
- The severity can differ in each individual but can affect:
 - reading
 - fluency,
 - decoding,
 - reading comprehension,
 - recall,
 - writing,
 - spelling, and
 - sometimes speech and can exist along with other related disorders.
- What does this information tell us regarding our AT Action Plan? <http://ldaamerica.org/types-of-learning-disabilities/>



The “FAST” Track

- **Frustration**
- **Anxiety**
- **Stress**
- **Tension**

Human Activity Technology (HAAT) Model

- Human: represents the skills and abilities of the person with a disability
- Activity: a set of tasks to be performed by the person with a disability
- Context: the setting or social, cultural and physical contexts that surround the environment in which the activity must be completed
- Assistive Technology: devices or strategies used to bridge the gap between the person's abilities and the demands of the environment

The SETT Framework

S = Student/Skills

E = Environment

T = Tasks

T = Tools



Adapted from Joy Zabala www.joyzabala.com

Ergonomics

- Inhibits blood flow
- Creates muscle shortening
- Stresses back muscles and compresses spine
- Can inhibit learning
- Compresses diaphragm
 - Affects breathing
 - Voice quality



AT Solutions for Writing

Low Tech Solutions

- Built up grips
 - Variety
 - Create your own using tennis balls
- Larger / thicker pencils
- Electronic Spellers
 - Franklin Spellers



Low Tech Solutions - Pens

Writing Solutions:



- “The Penagain takes a novel [ergonomic](http://ergonomics.about.com/od/buyingguide/fr/frpenagain.htm) approach to ink pen design. The body of the pen is shaped like a "Y" creating a cradle for the index finger to rest in.”

<http://ergonomics.about.com/od/buyingguide/fr/frpenagain.htm>



- Wide barrel pens can make it easier for some people to write due to their contoured shape. With a Fat Ergonomic Pen there's more surface area to grip which makes it easier to write.

Live Scribe Pen

- Records what it hears and what you write
- Uses specific paper for playback
- Connects to computer by USB for saving
- Tap on note and playback from there
- Jump forward and back in notes
- Dictionary
- Translation Apps
- Purchase Apps online
- [Demo](#)



SOME OF OUR FAVORITE APPS!



UNIVERSAL DESIGN FOR LEARNING (UDL)
A Placemat of Core Apps Serving Learning for All 2013
Barbara Welsford, M.Ed., ATP, ADE bwelsford@eastlink.ca

Multi-modes of Representation of Information



Including students with LD with Reading Difficulties



Including students with LD with Written Output Difficulties



Including students with LD with Executive Functioning Difficulties



Including students with Physical Disabilities



Including students with Vision Impairments



Including students with Hearing Impairments



Including students for Early Learning and/or Cognitive Delays / Communication Disorders



Universal Design For Learning And Accommodations

<http://at4kids.com/udl-and-apps-in-the-classroom>

Surface Pro 3



[Sign In](#) | [Sign Up](#)

Search this site








Microsoft
Surface

[Why Surface](#) ▾ [Products](#) ▾ [For Business](#) ▾ [Where to Buy](#) ▾ [Support](#) ▾

[Surface Pro 3](#) | [Power and performance](#) [Best of a tablet](#) [Windows, Office, and Apps](#) [Great Pen experience](#) [Buy now](#) [+](#)

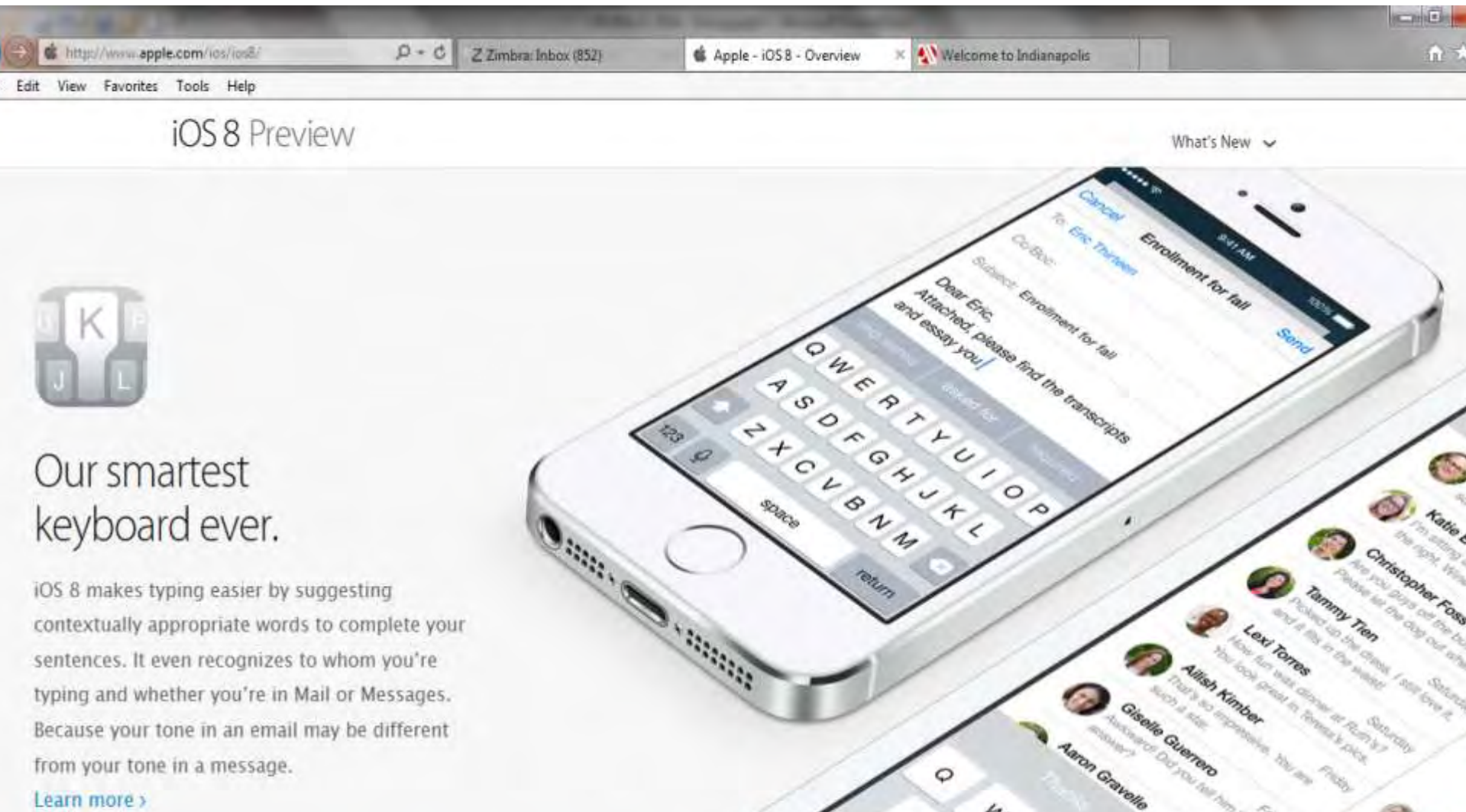
Ready to switch? Trade up your MacBook Air for a Surface Pro 3 now.

[See offer](#)

	PORTABILITY	PROCESSING POWER	MULTITASKING
 Surface Pro 3	 Weighs a mere 2.4lbs and is only 0.53" thin with the keyboard [®] attached	 Choose from Intel® Core™ i3, i5, or i7 processors	 With Windows 8.1 Pro, you can snap up to 3 apps or desktop programs side by side to multitask with ease
 13" MacBook Air	 Tips the scales at 2.96lbs and is 0.68" thick	 Available with Intel® Core™ i5 and i7 processor options	 OS X offers no support for snapping 2 apps side by side, but does allow you to multitask



iOS 8 – released in 2014



http://www.apple.com/ios/ios8/

Edit View Favorites Tools Help

iOS 8 Preview

What's New ▾

Cancel
To: Eric Thirteen
Cc: Bob
Subject: Enrollment for fall
Dear Eric,
Attached, please find the transcripts
and essay you

Q W E R T Y U I O P
A S D F G H J K L
Z X C V B N M
space return

123

Our smartest keyboard ever.

iOS 8 makes typing easier by suggesting contextually appropriate words to complete your sentences. It even recognizes to whom you're typing and whether you're in Mail or Messages. Because your tone in an email may be different from your tone in a message.

[Learn more >](#)

Reading & Writing Software Solutions

Kurzweil 3000

- Text-to-Speech software
- Helps improve reading speed and comprehension
- Note taking capabilities
 - Different color highlighters
- firefly
 - Access many features of Kurzweil through the internet
 - [firefly demo](#)
- Free download trial
 - www.kurzweiledu.com
 - [Kurzweil 3000 Demo](#)



WYNN

- What You Need Now
- Internet Features
- Freedom Scientific
- Scanning and Reading software
- Highlights text as spoken
- Icon friendly
- Built in study tools



TextHelp

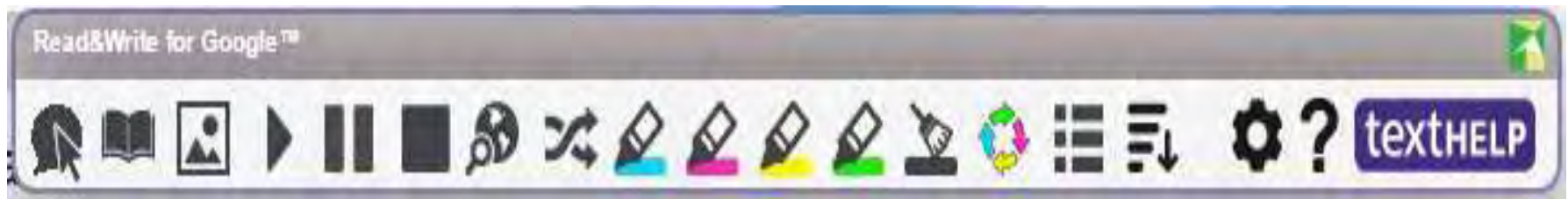
- Text-to- Speech software
- Helps improves reading skills
- Built in text and picture dictionaries
- Study skills highlighter
- Has a Google Chrome version
- www.texthelp.com



TextHelp for Google



- Open a webpage within the Chrome Browser
- Click on the Read&Write for Google icon to open up the toolbar (click on the icon again to close out the toolbar later)



Texthelp - iReadWrite



- [iReadWrite](#)- For iPads; reading and writing app with word prediction and text to speech - iReadWrite \$19.99

Premier Software

- Compose
- Predict
- Create study notes and much more!
- www.readingmadeeZ.com



The screenshot shows the Premier Literacy website. At the top, there's a navigation bar with links for Home, About Us, and a search bar. The main header features the 'Premier Literacy' logo and the text 'reading madeeZ.com'. Below this is a large image of a tablet displaying the software interface. A green navigation bar contains links for PRODUCTS, EDUCATIONAL SOLUTIONS, TRAINING, SUPPORT & VIDEOS, FREE TRIALS, ORDERING OPTIONS, and CONTACT. The main content area is divided into three columns. The left column, titled 'LITERACY TOOLS', lists various software options: PORTABLE TECHNOLOGY, BUNDLES, and INDIVIDUAL TOOLS (which is expanded to show English Talking Dictionary, E-Text Reader, PDF Equalizer, Scan and Read Pro, Talking Calculator, Talking Word Processor, Text-To-Audio, Universal Reader Plus, Write Now, and Worksheet Wizard). The middle column features a large advertisement for 'Write Now - Version 4.0', which includes a 'BUY NOW \$59.95' button and a description: 'Compose, Predict, Assist, all RIGHT NOW!'. Below the ad are links for Overview, Features, Screenshots, and purchase options for Download and CD Version. The right column, titled 'THE PREMIER STORY', contains two sections: 'The Possibility of Premier...' and 'The Power of Premier...', both describing the benefits of the software for students.

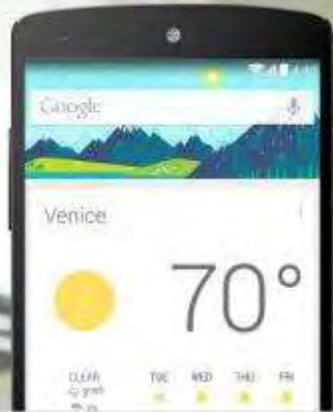
Google Now

Google now What is it How to get it Cards [Get it now](#)

Introducing Google Now

The right information at just the right time

From knowing the weather before you start your day, to planning the best route to avoid traffic, or even checking your favorite team's score while they're playing, Google Now brings you the information you want, when you need it.



Assistance around the clock

Clicker 6



Clicker 6

Literacy without limits!

Clicker 6 is the child-friendly writing tool that enables students of all abilities to significantly develop their literacy skills.



Claro

ClaroCom Standard or ClaroCom Pro

Can't decide which app would best suit you? Check out our comparison chart below to help you decide.



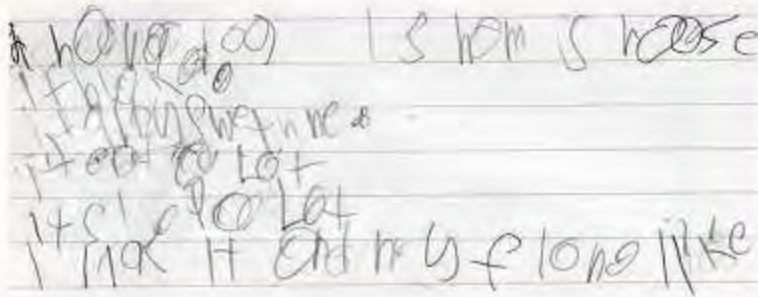
The image shows a comparison chart for ClaroCom Standard and Pro. It features a blue background with the ClaroCom logo and a list of features. Green speech bubble icons indicate features available in Standard, and red speech bubble icons indicate features available in Pro.

ClaroCom	Standard	Pro
Text-to-Speech	✓	✓
Prediction	✓	✓
Phrase Banks	✓	✓
Prediction Learns New Words	✓	✓
2 High-Quality Voices	✓	✓
Standard Prediction Dictionary	✓	✓
Buy Different Voices In-App Purchases	✓	✓
Communicate With iMessage And Email	✓	✓
Add New Phrases In Bulk		✓
Pinch/Flip Gestures		✓
Customise Colours		✓
Personalise Phrases		✓
Create New Categories		✓
Large Prediction Dictionary		✓
Post To Facebook And Twitter		✓

ClaroCom (free) is the same as Standard, except it doesn't contain 2 high quality voices (only iOS7 system voices are used) and you can't purchase more voices in-app.

Co:Writer - FlexSpell

Co:Writer helps students turn this:



...into this:

I have a dog. It's name is Rosie. It's brown.
It plays with me. It eats a lot. I like it and
my family likes it too.

Spelling errors reduced from 13 to 0
Punctualization errors reduced from 5 to 1
Capitalization errors reduced from 6 to 0
Note incorrect use of apostrophe

If students can write just 30% of what they want to say, Co:Writer will do the rest. As students write, Co:Writer "predicts" what they're trying to say and offers word suggestions in real time. Even the most egregious spelling and grammar mistakes aren't a problem for Co:Writer's proprietary FlexSpell technology. Co:Writer goes further, bringing in topic-specific vocabulary instantly when writing in the content areas. You have to try it with a student to believe the impact it has!

Ginger

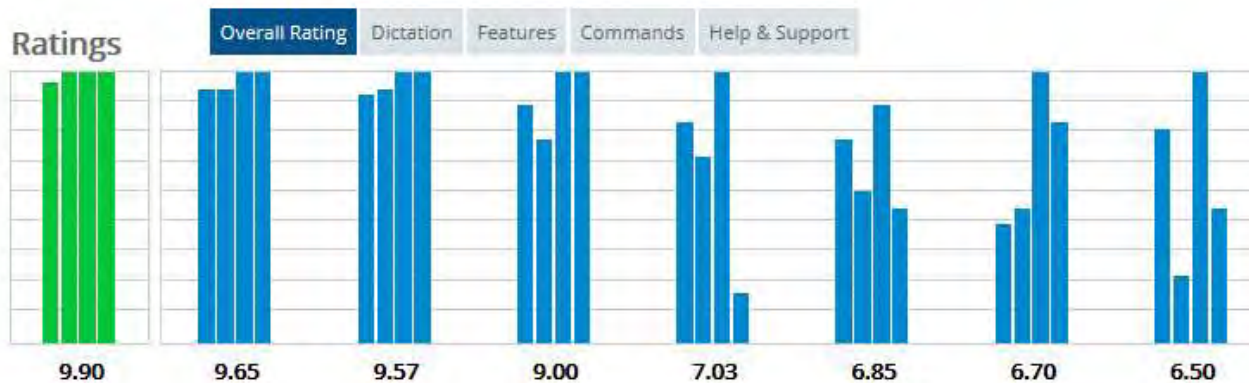
- Online grammar and spell checker
- Can see corrections as you type or use Ginger Proofreader to scan the entire document for mistakes
- Will read corrections out loud
- Has an mobile Android app
- Works inside Word and emails
- Text to Speech
 - Read emails and docs
 - Can choose voice and accent
- [Ginger Demo](#)



Voice Input Solutions

2015 Software Review

2015 BEST Voice Recognition Software Review REVIEWS AND COMPARISONS



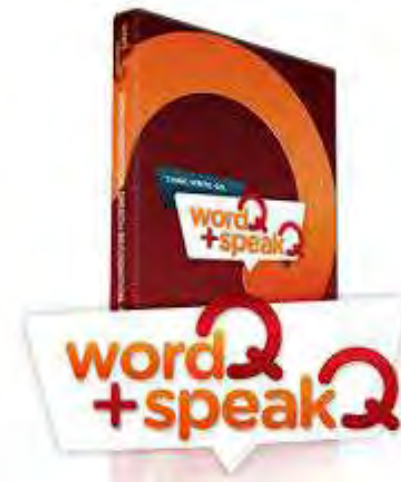
Speech Recognition Software

- Turn spoken words into text
- Connect with the timing of your thoughts
- Dictation speed 70 to 100 words per minute



Word Q / Speech Q

- Software that has built-in word prediction
- Suggests words
- Spoken feedback to hear what was written
- Speech Q is a plugin for Speech Recognition
- 30 day free trial
<http://www.goqsoftware.com/trial/>



wordQ + speakQ

Français | Quick links
Mind Tools
Resources
Contact
Support
Downloads
Store



Think. Write. Go!
1-877-674-7687

wQ: Use > arrow key to show/hear usage example indicated by the triangle
New Tip

Download Trial
Buy Now



Word prediction, speech feedback and speech recognition.



wordQ+speaKQ works in English, French, and Spanish.

Now, I can write using diff

- 1 different
- 2 difficult
- 3 difference
- 4 differences
- 5 difficulty

wordQ + speakQ

wordQ is a simple but brilliantly designed writing solution that improves with you, regardless of your age or writing ability.



Works in all these and more!

- Word prediction works even if words are spelled creatively or missing parts
- Offers a list of words with similar meaning to add variety to your writing
- Now available. Linguistically aligned dictionaries and speech feedback for English, French, and Spanish
- speakQ plug-in takes everything you love about WordQ and adds forgiving speech recognition in the mix
- Lets you type the words you know and use voice to text to say the ones you don't, from single words to entire paragraphs
- Lets you type the words you know and use voice to text to say the ones you don't, from single words to entire paragraphs
- Speech recognition helps you write everything you say from single words to entire paragraphs
- Offers suggestions for words you have difficulty pronouncing
- Train its voice recognition to understand your voice, with no reading required
- Allows you to mix typing and speaking for best results
- No voice commands to remember

Inspiration

- Mind Mapping software
- Allows User to “connect” ideas together
- Add in pictures and hyperlinks
- Can produce an outline form
- Better organization of essays
- \$39.95
- App \$9.99



Inspiration Examples



iHomework

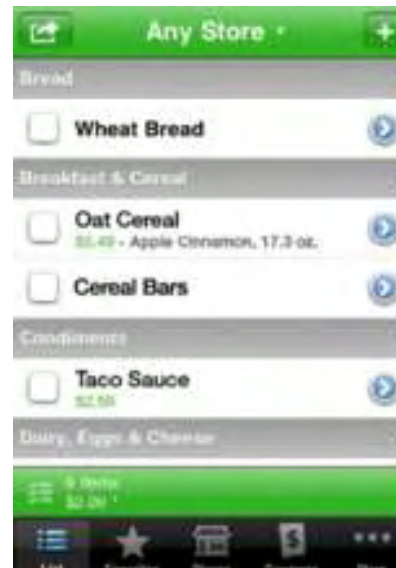


- Keep up-to-date with your school work, grades, to-do's, teacher's information
- School organizer that can be with you anywhere you go, whether that be on your iPhone/iPod touch, iPad, or Mac

Grocery IQ



- Pictorial shopping list
- Customize different lists for different users using pictures on camera roll
- Add your own items and categories
- Assign item prices
- Assign item locations (for example, aisle numbers)
- Several accessibility options
 - text-to-speech
 - uses large easy-to-see images
 - item prices automatically totaled
- \$4.99



iMovie



iMovie

Filmmaking doesn't get more indie than this.

Mini-masterpieces. Made on location.

Make beautiful HD movies anywhere with iMovie, the fun, feature-rich video editing app that's designed for iPhone 4. Create a video postcard of your day at the beach and publish it to the web without leaving your spot on the sand. Or make a movie of your child's birthday party and send it to your parents while the party is in full swing. You can start several projects on your iPhone 4 and finish them whenever you want and wherever you are.



iMovie
Get the iMovie app and start editing movies on your iPhone 4. Coming soon to the App Store for \$4.99.



- Share information via Facebook, Twitter, Email, or SMS
- Upload photos

MyMedSchedule

- Keep track of medication
- Reminders
- Refill Reminders
- Healthcare Provider Profiles
- Insurance Information
- Allergies
- Works across Platforms
- Free
- www.mymedschedule.com



What's New In AT and the AT Community:

- **Perhaps, Where We Are Going**

Nod by Nod, Inc



- Controls devices remotely
- Change presentation slides
- Type notes
- Environmental Control Units

\$149, Early 2015

<https://hellonod.com/>



Amazon Echo



- Speech-controlled speaker system
- Voice recognition - further distances
- Timers, news, information
- Invitation only

\$199, \$99 Prime members

MINDRDR FOR GOOGLE GLASS LETS YOU TAKE AND SHARE PICTURES JUST BY THINKING

NEUROGADGET - JULY 11, 2014

SHARE ON: [f](#) [t](#) [g+](#) [t](#) [in](#) [x](#) [v](#) [p](#)



Search



1,720

FOLLOWERS



1

NEURO
GADGET

Neurogadget.com

[f](#) Like

1,949 people like Neurogadget.com.



[f](#) Facebook social plugin

11

[t](#) Tweet

[f](#) 27

[f](#) Like





Resources

Atomic Learning Tutorials

AMAC membership also provides you with access to Atomic Learning videos. Click on the **Support** Tab in the Student Download Center and click on **Atomic Learning** to access video tutorials on many widely used applications and devices such as Microsoft Office and iOS for iPad and iPhone.





**Our Question to You:
What have You Learned today?**



The TFL Team



Carolyn Phillips

Director, Tools for Life

Carolyn.Phillips@gatfl.gatech.edu



Liz Persaud

Training and Outreach Coordinator

Liz.Persaud@gatfl.gatech.edu



Daphne Brookins

AT Funding & Resource Specialist

Daphne.Brookins@gatfl.gatech.edu



Martha Rust

AT Specialist

Martha.Rust@gatfl.gatech.edu



Ben Jacobs

Accommodations Specialist

Ben.Jacobs@gatfl.gatech.edu



Rachel Wilson

Tech Match Specialist

Rachel.Wilson@gatfl.gatech.edu

Disclaimer

This presentation is produced by Tools for Life which is a result of the Assistive Technology Act of 1998, as amended in 2004. It is a program of the Georgia Institute of Technology, College of Architecture [COA], AMAC and is funded by grant #H224C030009 of the Rehabilitation Services Administration (RSA), Department of Education. The contents of this presentation were developed under a grant from the Department of Education. However, those contents do not necessarily represent the policy of the Department of Education, Georgia Tech, COA or AMAC and you should not assume endorsement by the Federal government.